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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/532,907	03/21/2000	Douglas J. Holmi	02103-36601	6793
26162	7590	02/10/2006	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			GRAHAM, ANDREW R	
			ART UNIT	PAPER NUMBER
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DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/532,907	Applicant(s) HOLMI ET AL.	
	Examiner Andrew Graham	Art Unit 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23, 25-28 and 31 is/are pending in the application.
- 4a) Of the above claim(s) 1-17, 22, 23, 25-28 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/15/05 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Applicant's election without traverse of group II, comprising claims 18-21, in the reply filed on 11/17/2005 is acknowledged. Any previous objections or rejections of non-elected groups will not be treated below, as said claims are withdrawn from consideration.

Drawings

2. Replacement drawings were submitted on August 15, 2005.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "20" and "22" have been used to designate both angles and speakers between Figures 3A-3C and Figure 6. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. It is further noted that any corrections to the reference characters in the drawings should be reflected by amendments to the specification.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "seats positioned ... in the direct sound field of one of said plurality of electroacoustical transducers" from claims 18 and 20 must be shown or the feature(s) canceled from the claim(s). Speakers are shown, but no indication of the sound field and its relationship to the seats, as claimed, is illustrated. No new matter should be entered.

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Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. **Claims 20 and 21** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The final limitation of Claim 20 recites:

"wherein said first plurality and said second plurality of electroacoustical transducers are positioned substantially identically to, forward of, and in the direct field of, one of said second plurality of electroacoustical transducers"

Most critically, this limitation recites a (second) plurality (second) of speakers (transducers) positioned identically to, forward of, and in the direct field of one of the same (second) plurality of speakers. Thus, the language is claiming that one speaker (as a part of the second 'plurality') is positioned forward of and in the direct field of itself (as the "one of said second plurality"). For the purposes of rejection, "wherein said first plurality and second plurality" will be interpreted to mean "wherein said plurality of seats", similar to the language utilized in Claim 18.

Appropriate correction or clarification is required, as it is unclear how a speaker can be forward and in the direct field of itself. Claim 21 is rejected based on its dependency, and thus inclusion of all limitations therein, upon Claim 20.

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Response to Arguments

4. Applicant's arguments with respect to claims 18-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Clark et al (USPN 5754664), hereafter "Clark".

Clark discloses a vehicle audio system for outputting sound with ambient characteristics in an automobile.

Specifically regarding Claim 18, Clark teaches:

An automobile audio system for an automobile (8) (abstract, Figure 1)

having a passenger compartment ("interior of the vehicle") having a plurality of seats (front and rear seats shown in Figure 4, noted col. 2, lines 45-65; col. 4, lines 14-27),

said audio system (Figure 3) comprising:

a first audio signal source (12) having a plurality of output channels (32-25) (col. 6, lines 60-64)

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said plurality of output channels including a surround output channel (such as LR or left rear, "rear" being "surround", col. 6, lines 62-64); and

a plurality of substantially identical electroacoustical transducers (21,24) for radiating sound waves corresponding to said surround channel (may be same speaker, thus 'identical', col. 4, lines 34-44; 21 and 24 can output LR signal, col. 8, lines 54-55);

wherein said plurality of electroacoustical transducers (21,24) are positioned in said passenger compartment (interior of vehicle) such that each of said plurality of seats (front, back) are

positioned substantially identically to (Figure 4, speakers 21 and 24 both are nearly directly above seatback of front and back seat seatbacks, as is further substantiated by 'rear' nature of signal LR output by said speakers; both speakers 21 and 24 are also positioned in headliner, which also reads on "positioned identically" so far as it is defined by presented claim language and 'substantially' qualifier, col. 3, lines 63-66)

forward of (see Figure 4, seat portion of front and back seats are both forward of speakers 21 and 24, respectively; again, 'rear' nature of the throughput also supports rearward nature of speakers 21 and 24 relative to seats),

and in the direct field of, one of said plurality of electroacoustical transducers (21 or 24) (sound from speakers from front vehicle reach both front and back seat passengers, col. 4, lines 14-17; thus, since speakers 21 and 24 are same type of speaker, col.

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4, lines 34-44, said speakers 21 and 24 apply sound to front and back seats as well, as is further substantiated by sound from various speakers reaching front and back seat passengers from similar positions in the headliner, such as from 22 to front and rear seats, col. 4, lines 19-44).

Regarding **Claim 19**, Clark teaches:

Wherein said plurality of electroacoustical transducers (21 and 24) are coupled to said audio signal source by a single equalizer (LR for both passes through equalizer 144, col. 8, lines 9-22).

Regarding **Claim 20**, Clark teaches:

further comprising a second plurality of substantially identical electroacoustical transducers (23 and 25) (col. 4, lines 17-44), said first audio signal source (12) comprising a left surround output channel (LR) and a right surround (RR) output channel (col. 6, lines 32-34)

wherein said first plurality of electroacoustical transducers (21,24) are for radiating signals corresponding to said left surround output channel (LR) and (col. 8, lines 54-55)

wherein said second plurality of transducers (23,25) are for radiating signals corresponding to said right surround output channel (RR) (col. 8, lines 55-56),

wherein said first plurality and said second plurality of electroacoustical transducers (21-25) are positioned substantially identically to, forward of, and in the direct field of, one of said second plurality of electroacoustical transducers (23 and 25 are

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positioned relative to front and rear seats, as are 21 and 24 relative to the front seats, as is applied in the above rejection of Claim 18 to the similar rejection of Claim 18; please also see above rejection under 112 regarding the unclear language of this claim and the interpretation afforded herein).

Regarding **Claim 21**, Clark teaches:

wherein said first plurality of electroacoustical transducers (21,24) is coupled to said audio signal source (12) by a single equalizer (144) and wherein said second plurality of electroacoustical transducers (23,25) are coupled to said audio signal source (12) by a single equalizer (146) (each sets of speakers have at least one equalizer in common, col. 8, lines 9-22).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kolb (DE4419079) discloses a seat mounted surround sound system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Graham whose telephone number is 571-272-7517. The examiner can normally be reached on Monday-Friday, 8:30 AM to 5:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Graham
Examiner

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February 6, 2006

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XU MEI
PRIMARY EXAMINER